

*Features of PatchStaad*

PatchStaad is an Excel spreadsheet for preparing input of patch loads on Staad panel elements.

PatchStaad helps save time by avoiding tedious hand calculations. User gives the global coordinates of the top-left and bottom-right corners of the applied rectangular load and the FEA panel in the Staad model. PatchStaad works out the load encompass area of the load on the FEA element relative to the local coordinates of the panel.

**Features**

- ◆ The applied load may not lie on the panel.
- ◆ Full area of the panel may be under pressure.
- ◆ Staad code is produced for copy and paste into the Staad model.
- ◆ For each panel loading, data can be stored, retrieved and or modified.
- ◆ Size of applied load, panel and the patch load is calculated and shown.
- ◆ Total load carried by each patch loading is shown for reference and checking.
- ◆ A diagram is displayed showing the relative size and position of the applied load, the FEA panel and the patch area load.
- ◆ An easy to use database facility is included within the template file. Data for more than 3000 different load and panels can be stored in a single Excel file.
- ◆ The Data is kept in the worksheet STORE that is visible to the user. Using the spreadsheet features of Excel, data in this file can be generated for new panels and or modified for existing ones.
- ◆ The template has virtually no user interface. The printed Output matches the Screen Display. Knowing how to use Excel and the ability to verify results as a designer is sufficient for using PatchStaad.
- ◆ Shaded cells in the spreadsheet signify User-Input and un-shaded cells signify Spreadsheet-Results. This permits easy checking at a glance by the users and the checkers of the PatchStaad output.